

CLAIMS

1. Aiming device for firearms, comprising a retro reflective lenticular component which is seen by the shooter as having at least one first color when the aim line has a desired orientation and having at least one second color when the aim line does not have said desired orientation.
2. Aiming device according to claim 1, wherein the aim line has the desired orientation when it is parallel to the gun barrel axis.
3. Aiming device according to claim 1, wherein the aim line has the desired orientation when it has a predetermined slant to the gun barrel axis.
4. Aiming device according to claim 1, wherein the second color is the absence of color.
5. Aiming device according to claim 1, wherein the first color is a bright color.
6. Aiming device according to claim 1, wherein the retro reflective lenticular element is a lens that comprises two opposite convex walls, one of said walls, being capable of concentrating incoming parallel light beams upon the other wall.
7. Aiming sight, according to claim 1, wherein said retro reflective element is a convex lens, comprising two opposite walls, one of said walls being tinted with at least two different colors.

8. Aiming sight according to claim 3, wherein one of the colors is located at the center of the wall, and the other color covers the peripheral area.
9. Aiming sight, according to claim 1, wherein the retro reflective element comprises a convex lens and a parallel wall portion, located at the focal point of the lens.
10. Aiming sight, according to claim 9, wherein the wall portion is tinted with at least two different colors.
11. Aiming device according to claim 6, wherein the retro reflective lenticular element further comprises at least one fully reflective surface.
12. Aiming device according to claim 11, wherein the fully reflective surface is plane and symmetric with respect to and perpendicular to the axis of the cylindrical lens.
13. Aiming device according to claim 11, wherein the fully reflective surface is convex, with a tangent that is perpendicular to the axis of the cylindrical lens at the point of said surface at which said axis intersects said surface.
14. Aiming device according to claim 11, wherein the distal surface of the cylindrical lens comprises at least two fully reflective surfaces, said surfaces being differently colored.
15. Aiming device according to claim 13, wherein the fully reflective surfaces are so shaped as to indicate deviations in different directions.

16. Aiming device according to claim 1, being an add-on element that further comprises means for attaching it to a firearm when desired, without concealing the existing sights of said gun.

17. Aiming device according to claim 1, wherein the reflective surfaces are only partially reflective.

18. Aiming device according to claim 1, wherein the colors are made of as material chosen in the group consisting of phosphorus, fluorescent materials, and radioactive luminous materials.

19. Aiming device according to claim 18, wherein the colors are made of Tritium.

20. An add-on aiming sight, according to claim 16, used alternatively or complementarily with the original aiming sights of the firearm.

21. Aiming device according to claim 18, wherein the colors are printed on an electroluminescent layer, illuminated electrically using a feeding battery.

22. Aiming device according to claim 21, further comprising a photoelectric switch through which the feeding battery is connected, being in its non-conductive state, as long as the gun is in its sheath.

23. Aiming device according to claim 21, which is disposable.

24. Aiming device according to claim 1, comprising:

- a) a retroreflective lens, assembled at the proximal end of said aiming device and positioned, such that its central axis is essentially parallel to the central axis of the barrel of the firearm;
- b) a light source assembled at the distal end of said aiming device, for emitting light beams toward the central axis of said lens;
- c) a first light gathering rod, assembled following to said lens for collecting ambient light during daytime, and light emitted from said light source during nighttime, and for reflecting and/or diffracting the collected light as beams of said first tint, toward the proximal end of said lens, essentially in parallel to its central axis; and
- d) a second light gathering or a transparent rod, assembled co-linearly within said first light gathering rod and having a second tint, for collecting ambient light during daytime, and light emitted from said light source during nighttime, and for reflecting and/or diffracting the collected light as beams of said second tint, toward the proximal end of said lens, essentially along, and in the vicinity of, its central axis ,

wherein said first tint is seen by the shooter as occupying most of the projection of said lens, when the aim line has a desired orientation, and said second tint is seen by the shooter as occupying most of the projection of said lens, when the aim line does not have said desired orientation.

25. Aiming device according to claim 1, wherein the firearm is a gun that is selected from the group consisting of:

- toy guns;
- PaintBall guns; and
- A gun that is intended to shoot a real, dummy or virtual projectile of any shape to a target.

26. Aiming device according to claim 14, wherein the fully reflective surfaces are so shaped as to indicate deviations in different directions.